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# COLMAN'S RURAL WORLD

DEVOTED TO AGRICULTURE HORTICULTURE HORSES CATTLE SHEEP SWINE ETC.

Established 1848

ST. LOUIS, MO. WEDNESDAY, JANUARY 1, 1902.

Volume LV, No. 1

## COLMAN'S RURAL WORLD.

H. P. DAWSON, Editor.  
L. V. CHAMBERLAIN, Editor.

Published every Wednesday, in Chester building, corner of Eighth and Olive streets, St. Louis, Mo., at one dollar per year. Eastern office, Chamberlains, 539 Temple Court, New York City. Advertisers will find the RURAL WORLD the best advertising medium of its class in the United States. Address all letters to COLMAN'S RURAL WORLD, Chemical Building, St. Louis, Mo.

Subscribers must bear in mind that the subscription price of the RURAL WORLD is one dollar a year, and that we do not receive single subscriptions for a less sum, but in our constant effort to enlarge our circulation, we do allow old subscribers to take actually NEW subscribers at the fifty-cent rate, adding a new name with their own for one dollar, and other new names at fifty cents each, but in no case do we accept TWO OLD subscribers for one dollar. We are willing to make a loss on a new subscriber the first year, believing he will find the RURAL WORLD indispensable ever after. We also send the RURAL WORLD in conjunction with either the twice-a-week St. Louis "Republic" or the twice-a-week "Globe-Democrat" for one dollar and fifty cents a year, and new subscribers may be added at the fifty-cent rate. Published at this remarkably low price—at less than actual cost—all subscribers must see the necessity of our dropping from our subscription list every name as soon as the year paid for expires. Thus if, on the printed slip on each paper you see John Jones, Nov. 31, it indicates that the name will drop from the list at the end of November, and if he wishes to continue to receive it, he must renew his subscription. If he would do it a week or two in advance, it would save us the trouble of taking his name off the list and again putting it in type, when he is renewed, which frequently causes mistakes. This is the season to push the good work of getting new subscribers. Show your neighbors a copy of the RURAL WORLD, call their attention to the large amount of fresh, original, entertaining and instructive reading matter contained in each issue; tell them of our large number of intelligent correspondents, and how highly you appreciate its weekly visits and of the low cost at which it can be received. If our readers will spend but a portion of one or two days in enlisting in this work they can easily add more than fifty thousand new names before the first of January! Who will engage in this work? Will not each reader, male and female, young and old, go into the field at once and see how much he can do to help not only the farmer, but the cause of progressive agriculture?

"The Markets," on page 8, are a source of both profitable and interesting study. Note, for example, the fruit and vegetable quotations in this issue, and see how "seasons" for fresh fruits and vegetables have been eliminated or rather extended the year around. Florida strawberries, New York grapes, northern grown potatoes, New Orleans lettuce, California cauliflower and eastern hot-house cucumbers all on the St. Louis market in mid-winter.

Professor W. J. Spillman, who has for a number of years been connected with the agricultural experiment station at Pullman, Wash., has been selected to succeed Prof. F. Lamson-Scribner as chief of the Division of Agrostology. Professor Spillman has been carrying on grasses at the Washington station, particularly along the line of wheat breeding. He will be a worthy successor to Professor Lamson-Scribner, who goes to the Philippine Islands to establish a Department of Agriculture.

The statement on page 2 of this issue, from the "Chicago Produce," regarding the unity of sentiment among agricultural papers as to the wisdom of federal legislation which shall prevent the makers of and dealers in oleomargarine imposing their goods on consumers as butter, should make clear to Congress that this is not simply a farmers' matter. The resolution adopted by the Missouri State Board of Agriculture, which also appears on page 2, shows this fact. Missouri's largest agricultural interest is live stock, but the Board of Agriculture, in no uncertain terms, asks Congress to enact the Groat of a similar bill. And so, according to the mouthpiece of the oleo makers at the Chicago Stock Yards, such bodies as the Missouri State Board of Agriculture, comprising 15 members and including the Governor, the Dean of the Agricultural College, the former U. S. Secretary of Agriculture and but one man directly interested in dairying, together with 120 editors of the leading agricultural papers of the country, are "a lot of confederates, annihilators and misinformed galsots."

### THE 1902 OUTLOOK.

With sighs of regret for opportunities not improved, with reviews of failures, with thoughts of honest, earnest labor not crowned with success because of untoward circumstances, the book of life for 1901 is a completed volume. To every thoughtful individual the mistakes of the year, its losses, its experiences are fraught with some lesson or some suggestion that will enable him to take up the labors of the new year with courage. The evidences of crop failures for the year 1901 are still too real a fact to be ignored. They will color the farming operations of the coming year. The effort farmers have made to relieve the conditions due to the continued drought will prove to many that a different mode of farming must be pursued. One man in a community who puts into practice the intensive methods of farming will show whether such farming is profitable in his district. Men are prone to follow a leader, and many have many problems for the individual to work out. There will be doubters and there will in 1902 because of the drought, croakers, much as there were.

When they wielded all our feeble states to one united chain, And proclaimed an open market to the wide world's brawn and brain, Kings and tyrants of all lands rolled their heads and raised their hands As they clamored at the notion of a Nation gone insane! And they said: "You'll never do it!"

Spite of friction and faction, There was singleness of action, And we did.

This spirit is still vigorously alive in America, and especially so in this Middle West. If we did we can and we will see to it that the key note of the farming population. No pursuit has been given so much attention by science in recent years as has agriculture. This is right. The foundation of a nation's wealth and greatness may be traced to her fertile fields and her rural homes. Life in the city is a struggle with the middle class for existence. The hope of the nation is with the middle class. The rich do not have to toil, and a life of luxurious idleness weakens the mentality. The great law of the universe, what is not used becomes useless, is verified in the children of the rich. The struggle is in the centers of population for the poor man to earn a living so great that little time is left for vigorous thought; hence the country home, where there is opportunity for putting intelligent thought into labor is the recruiting ground of the nation.

In view of these facts farmers should study every phase of their life. In 1902 let the aim be to so conduct the farm in all its manifold lines as to endeavor it to the child. If the home is unable to provide at present all the comforts desired, let there be a union of efforts to improve the conditions to all that is possible. With tact teach the lady and lasses to love pastoral poems. Secure for them books on the various lines of farming. Make much of all farm literature. Cultivate the ideal in farm life, for the ideals must precede the realization. The difficulty is many linger too long on the ideal. This is unfortunate. Each family in a rural district has its part to perform in establishing the era of more intelligent farming. The RURAL WORLD is so convinced of the benefits of a knowledge of the underlying principles of agriculture to farmers that it will more vigorously than ever, if possible, spread the gospel of higher intellectuality for the farm home. It will never cease its efforts until the principles of agriculture are taught in all rural schools, until our agricultural colleges are crowded with men and women who are in attendance with the sole purpose of returning to the farm with a better knowledge of their business. With this aim we greet our readers with wishes for peaceful, prosperous and a Happy New Year.

### A GOOD WAGON JACK.

The greasing of the wagon is often postponed until the creaking of the wheels sets one's nerves on edge, to say nothing of the damage to the wheels caused by the friction. This neglect is very frequently due to the fact that there is no convenient tool to aid in lifting off the wheels. Farmers should avoid back-breaking tasks when wood or iron can be made to save man's muscle. A wagon jack will do this work most effectively. A thrifty farmer gives the following directions for making a substantial wagon jack:

Take a block three inches wide, four inches thick and 18 inches long; then bolt two upright pieces to it 30 inches long; bolt the uprights, one on each side 21 inches from end. Fasten a strong brace from the long end of first block to the upright pieces; first hole one-half inch in the upright pieces; first hole two inches from top; second, five inches; third, eight inches lower. These different holes are to raise or lower the lever. When used on a high or low wagon, put on your lever opposite long end of block. Take a three-eighths-inch rod, 28 inches long, rivet it on an end section of a stick or any other sharp iron, crossways on the rod; pass it between the two uprights and bolt to the lever 14 inches from the end. The lever should be three feet long, and the hole in the lever, for pin in upright eight inches from the end.

### WHAT IS AGRICULTURE?

We deem it unfortunate that many of those who are interested in certain agricultural specialties fail to recognize the fact that their respective specialties are but divisions of one great industry—the world. This disinclination is quite strongly marked among our horticultural friends, and often leads them into positions that are illogical and, to our mind, untenable. For instance, in connection with the demand which arose a few years ago for instruction in agriculture in our rural schools, horticulturists quickly fell in line and advocated the teaching of "agriculture and horticulture" in the rural schools, but soon began to manifest a strong tendency to modify their demand and ask simply for the teaching of horticulture, which was a logical step, when starting with the idea as embodied in the combination of the words "agriculture and horticulture." The false premise is in assuming that horticulture is co-ordinate with agriculture.

Webster defines the word agriculture thus: "The art or science of cultivating the ground, including the harvesting of crops and the rearing and management of live stock; tillage; husbandry; farming." If Webster is correct, then horticulture is not co-ordinate with agriculture, but is simply a division, as is live stock-husbandry, and we protest against the use of the word horticulture in a way that conveys the idea that it is distinct from agriculture. The fruit and flower growers certainly have to do with the cultivation of the ground and the harvesting of crops; they have to do with the same principles of plant growth, the same principles of soil physics, of soil fertility and of climatology relative to plant growth as have the growers of potatoes, corn and cow peas, and it is absurd for the former to say, in effect, that their industry is separated from that of the latter into a distinct and separate division. The line which is drawn around any one of the great divisions of agriculture is an arbitrary one, and is made to include in some cases what in others is excluded. To illustrate, if one were to name a list of crops commonly grown by general farmers, "agriculture" would very likely be named as one. Nevertheless the up-to-date horticulturist—that is the orchardist—is quite apt to include the growing of clover as a legitimate and logical part of his operations and for the purpose of enriching the soil in which his trees are growing; and it is quite likely that he will utilize some of the clover as hay and pig pasture, and so on. And on the other hand, the "agriculture" may extend his line until he includes within his operations the growing of small and orchard fruits, the producing of honey, etc., or he may make his circle of operation so small as to include merely the growing of clover, and hay crop to be sold. The market gardener, who is usually classed with horticulturists, will grow beets as a regular part of his business, and the general farmer, or "agriculturist," will grow them for stock food. If the stock farmer grows the beets for a herd of cows, he is not a market gardener, but a farmer, and the beets are his stock food. And if he grows beets to feed to a bunch of young pure-bred shorthorn bulls, is he only a stock breeder?

Surely these different lines of industry are sufficiently closely related to permit of a general classification under some one term, and that term, according to Webster, is agriculture. Hence, we have our agricultural colleges, where apple and rose culture, corn growing and cattle breeding are all studied as divisions of the general subject of agriculture; and our National Department of Agriculture with its various bureaus and divisions, with experts in charge of each, all working more or less independently, yet harmoniously, and presided over by the secretary of agriculture. And, by the way, it is just such a logical conception and arrangement as is found in the United States Department of Agriculture that should, and we trust will, be found in the agricultural exhibit of the St. Louis World's Fair of 1903.

### "THE LITTLE SIMPLETON."

In the report of the farmers' institute held at Festus, Jefferson County, Mo., as published in the Jefferson "Democrat," we find the following regarding a RURAL WORLD reader:

"Our writer and progressive citizen, Ephraim Williams, who has been and delighted the people with the working of his wonderful Road grader. On Friday he graded 100 yards of road in 40 minutes and on Saturday 225 yards in one hour and 15 minutes, thus grading over 300 yards in less than two hours. Prof. Blinn ordered one sent to him for his own use. Every one who saw it work expressed surprise and gratification. Its simplicity is almost beyond comprehension to those who have not seen it. It would suggest that Uncle Eph call it the 'Little Simpleton.'"

### DON'T WASTE THE MANURE.

The wall of the eastern farmers over worn-out and abandoned farms should be a warning to western farmers. Excessive cropping of heavy feeding plants will exhaust the most fertile land. How to supply needed fertilizers at least cost is a problem that should have as much attention as the harvesting of the crop. This may seem to be stating the case very strongly, but this fact in farming cannot be too strongly emphasized, because farmers are so often neglectful of their cheapest fertilizer—the manure pile.

J. W. Mitchell of the Kansas City Stock Yards says: "There has never been any manure sold from these yards. The farmers could have it for the hauling of it away. We clean pens once a week. We have 14 double carts that hold three yards that are kept in use six days in a week. They take from 20 to 25 loads each day, making from 1,500 to 18,000 yards per week, and this is dumped into the river. The farmers of the county do not seem to appreciate the value of manure, as we do not have a dozen loads per year hauled out by them."

Such statement does not seem so startling when we know that the manure on most farms is not treated so as to yield the best results. A portable barn would seem to be the need on some farms, it seemingly being easier to move the barn than the manure.

The reports from the various experimental stations and the experience of men who have built up old and so-called worn-out farms to a state of high fertility, without exception urge that the manure be not wasted. We have known farmers who would gladly give the manure to another farmer if he would only take it out of the way. We are inclined to think at the present time that there are not many such; but there are not enough who place a money value on every shovelful of manure. When a farmer treats his manure pile as though it had no value, his manure pile, though it may yield profit, is a waste. True, the item of labor in handling manure is large and one must study how to reduce this to the minimum. The manure spreader is a valuable implement because it saves so much of the labor of handling manure. Then in hauling, one must count the cost. Manure cannot be profitably hauled long distances. Nevertheless, it will pay farmers to care well for the manure pile.

### STILL FORNIST THE SPARROW.

Editor RURAL WORLD: I am glad that the English sparrow has found a friend and champion in Mr. J. L. Amesden of Iowa. A one-sided fight is a long and some affair to say the least. Friend Amesden's interest in and defense of the sparrow betrays a goodness of heart and kindly disposition worthy of a better cause. I sincerely hope a part at least of what he says in the defense can be substantiated by actual observation. It is a bad bird indeed of which nothing good can be said. It has been Mr. Amesden's good fortune to be so situated as to see only the sparrow's best behavior. Were he a farmer, being as observant as he is, he might have other evidence that would cause him to change his mind. A flock of them can soon eat all the seed from a patch of Kaffir corn, and sorghum, millet, and wheat and all small grains pay heavy tribute to their greed. They do not fight the blue martin, but if Mr. Sparrow can get possession of the Martin's house, Mr. Martin can look elsewhere for a home. The only birds that can hold their own with the sparrow are the bee martin, or king bird, and the shrike. All others are being crowded to the wall by the sparrows that simply take possession, and all others have to move on. They increase so rapidly that it is a question of only a short time when they will have complete possession of the continent of America.

I have it from good authority that a farmer in Pennsylvania with his boys went into his barn one night with a light and with paddles killed 500 sparrows, enough to destroy a large amount of grain in a year.

With all due respect to Mr. Amesden I would like to see all of the English sparrows in America dead, and would my part toward giving them a decent burial. Vernon Co., Mo. C. A. BIRD.

### ETCHINGS FROM EDGEWOOD.

Editor RURAL WORLD: After a lapse of over two years, for which I trust the readers of the RURAL WORLD are very thankful, the spirit moves me to keep my promise to "write again," even though the delay be so long that I am no doubt forgotten. Four snow storms in ten days and before Christmas, too, is some somewhat remarkable experience. On the 5th and 6th the mercury was hovering about the zero mark, and not to think we were living in Alaska. Instead of Southern Missouri, but "the doctor" and I had gotten things into pretty comfortable shape for the stock, and the wood pile was ready for the onslaught of the stove and fireplace, so we can watch the sparrows fly to the big chimney in both mental and physical comfort. We are making a list of shredded fodder, and so far as we have tried it consider it a success. We had it blown into the V-shaped wood from whence it is discharged from the bottom into mangers, so arranged that none can be wasted. To see the long rows of cattle plunge their noses into it

up to their ears is to make one believe they like it, and there's a little left that it looks as though we wouldn't have to clear the mangers on this winter. I scattered about a barrel of salt through it, as it went into the mow (70 shocks in this lot), which appears to be "just about salt enough," for the cattle eat but little salt outside, and as it brings some moisture to the fodder it thereby reduces the dust.

I am inclined to believe that notwithstanding the high price of feed of all kinds we shall find in the spring it feed to carry cattle through, especially if feeding is done judiciously and without waste.

RICKMER.

Dallas Co., Mo., Dec. 16.

### PEBBLES FROM THE POTOMAC.

Editor RURAL WORLD: In these busy days one scarcely realizes the flight of time till the bells ring in the tidings that a new year has been launched forth on the great ocean of eternity. The first year of the century has well-nigh completed its mission, and—

"Like frostwork in the morning ray,  
Like fancied fabrics melts away."  
These dull December days. In vain Time lays his palsied hand on the dial of years to retain his throne; already at the castle gate he hears the youthful giant fretting for assault, and nailing his colors to the mast and passing strange to say, but few essays to break a feeble lance in behalf of the reigning monarch. The pictures so lately black and brown are now white with snow, and the hills have donned their winter shrouds. The thrifty farmer has much to be thankful for, as by his fields enjoying the bright pages of the RURAL WORLD.

"Whose wrinkled news pages thrice con-  
fined o'er \*\*\* Beguiles the dreary  
hours away—"

He acquires much information that will eventually become valuable when the planting season arrives. The brilliant and colorful pages of the RURAL WORLD, the "Home Circle," and the valuable and entertaining articles from the pens of alert correspondents conspire to produce a paper invaluable to innumerable individuals who desire to keep abreast of the times, and we predict, without hesitation, that with its enlarged and superior circulation, the RURAL WORLD will surpass even its past excellence, the coming year, and in the realm of agriculture literature it will glow like a solitary star in the heavens at midnight.

SUCCESS—The ladder of fame is usually ascended by steps. Many of our most distinguished statesmen have had thrilling experiences in reaching their exalted stations. They are well-schooled in the salutary discipline of early toil. Their history reads like romance and excites the sympathy and admiration of mankind. Who can tell but that the boy who slides a snow to-day may yet be called to the White House? No other country offers similar opportunities to the boy as does America. This is a century which rewards talent combined with energy. Senator Warren, of Wyoming, is a striking example of what energy, when properly combined with talent, can accomplish. "Many years ago the Senator was a boy in Massachusetts," says the Washington Post, "living in an old-fashioned, unpainted farm house. The kitchen fire-place was so large that it took a horse to haul in the back log, which was almost half a tree. There were no windows in the kitchen, and a pot hanging upon the hooks, while in the corner stood the loom. The attic was the bedroom of the future Senator and his brother. It was a cold room, with crevices through which the snow drifted, and the boys came to the conclusion that they could find something warmer than the mattress on the floor. The took a large firebox, filled it with hay, pulled the cover of the box over them and slept like tops." "In those days," said the Senator, "I used to get up at 3 o'clock in the morning and feed the cows, clean the barn, split wood, get my breakfast, and then walk three miles to school." This is the kind of energy that succeeds every time.

FRANKING PRIVILEGE.—It may be of interest to many to know something of the history of the franking system, under which the government mails are carried free of cost. This method was in vogue in England many years ago, and was adopted in the United States in 1776, when the Continental Congress granted that privilege to private soldiers actually in service. This system was gradually extended to Senators, members of Congress, secretaries, bureaus, oficers, postmasters, delegates, etc. It was claimed that this privilege was abused, which resulted in several attempts to legislate reform schemes to check the encroachments of the privilege. In 1872 it was estimated that if this mail matter was paid for at the regular rates it would bring in a revenue of \$3,500,000, and in 1873 the franking privilege was abolished, and \$1,896,900 was appropriated to purchase stamps to be used for government purposes. In 1874 and 1875 the franking privilege was restored, and bids fair to stay on the large books for the future. The representative is enabled to send broadcast books and documents printed by the government to his constituents, without cost to either party.

NITRINKA.—Virginia is the banner peanut-growing state, with an annual

output of 3,000,000 bushels. Tennessee and North Carolina come next.

There are now 49 agricultural experimental stations in the United States. Chemists employed, 137; botanists, 59; entomologists, 42.

New Orleans claims that sugar was manufactured there in 1798.

Michigan is said to supply the country with celery.

Someone has figured it out that the United States uses 4,000,000 feet of pine lumber annually in the manufacture of matches; that about 10,000,000 ties are needed each year for our railroads.

Mr. Carnegie has offered Washington \$100,000, toward the building of a national university here.

Eating apples are worth \$3.20 per bushel, retail, in Washington.

The local market is liberally supplied with many varieties of wild game, and the possum and rabbit are especially in evidence.

New Florida tomatoes are on the market, and are delicious eating—so "tis said.

B. F. GILLESPIE.

Washington, D. C., Dec. 22, 1901.

### WINTER DAYS AT SEVEN PINES.

Editor RURAL WORLD: Along in early December I made amble wind breaks to protect the bee village against the severity of the north and west winds, and when the high breeze and the low temperature came shipping in on Dec. 13, 14, 15 and other days of the month, the hosts of Apis mellifica at Seven Pines were pretty well walled in with corn stalks. And how sudden these changes of temperature come. On the 12th light rain fell, some bees were out, and I noticed ants moving around. That night colder conditions came, and in a few days the Mississippi had changed from clear to a gorge of solid ice which formed a bridge between us and the Illinois side on the 17th. A fine, clear quality of ice was harvested by our dealer, and he sold it at 25 cents per bushel. The thickness of the ice was from 10 to 12 inches, and in keeping with the high rating in other affairs of the time.

RIVER IMPROVEMENTS.—Some work in the way of dike building will be made along the Des Moines river, and as a means to prevent severe washing of the bank on the Missouri side of the river. At one point where dikes will be made the Des Moines has changed its channel a half-mile from its original course when the line between the States of Iowa and Missouri was established, and farms of forty acres and on up to a hundred have been washed away.

PRICES THEN AND NOW.—From the Alexandria Commercial printed in January, 1880, I copy the following price list to show the average of values 22 years ago, and to compare them with prices of to-day. Wheat, 80 cents per bushel; corn, 30 cents; oats, 25 cents; sugar, 9 and 6 pounds for a dollar. Thus it appears that prices of products change across the line between producer and consumer and it is not easy to hold values at a point where both sides are satisfied. Upon the whole, corn, oats and people are favored, and the general tendency is for elevating and bettering of the great laboring masses.

GOOD BYE, 1901.—In northeast Missouri the year takes its leave with a record of much new history, particularly so in affairs meteorological. In this portion of the state the deficiency of moisture is near 20 per cent, and yet with all this and the excessive high temperature of July, the farming interests have maintained their balances pretty well. When the spring time comes our farmers will be well drilled and in good marching order for the new campaign, and will go forth to conquer. "It will not do to stop," said Fred Fawcett when marching through the awful heat of the arid region of California. Faith and works achieve great victories.

### JASPER BLINES.

#### A GOOD DICTIONARY.

No book is of so much value in any household as is an unabridged dictionary. It will settle many disputes and is a source of invaluable information, in short is the most comprehensive and compact library extant. We take great pleasure in recommending to RURAL WORLD readers Webster's International Dictionary, which in pronunciation, spelling and definition, is the authority used in this office. In addition to its use as a dictionary, it contains many other features of great value, one of which is the Biographical Department, which briefly gives the date and place of birth, and if deceased, the date of death, with the line of work pursued and the correct pronunciation of the name of 10,000 individuals. To many families whose reference books are limited these facts will enable one to direct his effort so as to secure other information desired regarding any prominent character of historical interest. Then, the latest editions have a supplement of twenty-five thousand words and phrases which contains the newest words made necessary by invention, scientific discoveries and commodious relations. This supplement has been edited by Dr. W. T. Harris, formerly of Missouri but now at Washington, D. C., as U. S. Commissioner of Education. Webster's Dictionary is published by G. & C. Merriam Company, Springfield, Mass., but can be obtained from any book seller.

### NOTES FROM AN OHIO FARM.

Editor RURAL WORLD:

POSTS.—Ten or eleven years ago next April I set 50 sawed oak posts after charring the part set in the ground. Inspection last week proved all sound, excepting two that contained much sap wood. The same spring I set 30 split oak posts without charring and more than half are gone. We don't often use oak posts, but at that time were fencing a good deal and trying to save our locust until it got a little larger. I could make nearly 1,000 locust posts now, and good posts of this sort will last perhaps 40 years. A sound post is standing on this farm which was set in April, 1854. It is a wonder to me that the people of Missouri do not plant more locust groves. In some places I was told that borers killed the trees, yet I saw sound, healthy trees here and there all over the state. I should think that farmers would go to almost any sort of trouble to get some kind of post timber that would last longer than the oak, that is in use all over the state and only lasts from eight to twelve years.

Mulberry makes a good post if out of a tree large enough to split, but round mulberry lasts but little better than oak; the Russian varieties that were so highly recommended a dozen years ago do not grow any faster than native sorts, and some of them winter kill badly.

Oxeye hedges make a good post, and may be used while quite small; if locust did not do well with me I would grow the oxeye in thick groves. Forestry certainly will claim our attention in the near future to a greater extent than it has in the past, and there are thousands of acres of land now under cultivation which would pay a greater profit if put back into timber.

RABBITS.—Two of my boys and a neighbor boy shot 30 yesterday and will ship them to-day. They are worth about 15 cents a dozen, so the boys made a good day's work and had their fun besides.

They said the fun was worth 100. Rabbits are a great pest and destroy many young orchards. We protect young trees by tying a dozen tobacco stalks around the trunks, but we cannot protect any beans or peanuts this way, and Mr. Cottonail gets in his work and does a good day's work and had their fun besides.

SKUNKS.—We do not allow traps on the farm, as we want to protect the skunks. They seldom do our poultry any harm, and we keep our fowls all housed and in coops the year around.

Several states have made laws protecting skunks, and all will do so as soon as farmers fully realize the useful character of the animals. I have seen them at work digging out grub worms, and if their droppings get in any garden they seldom eat anything but insects. There is, perhaps, a dozen on the farm, and I wish that there were ten times as many.

HOG CHOLERA.—I heard, Saturday that this disease was killing hundreds of hogs 60 miles west of me. It seemed to start in hogs at a distillery. We have seen it since last when it came from the same source. I suggest that hogs fed on still slop are possibly not the most healthful meat one can use on the table.

C. D. LYON.

Southern Ohio.

### SOUTHERN ILLINOIS NOTES.

EFFINGHAM CO., ILL.—Cloud, rain, snow, glom and monotony were dominant features during December. The moderation of the weather during the holiday week produced muddy roads and unpleasant traveling, an innovation on the dry and hard roads and pleasant atmosphere of the previous months. A cold wave just before Christmas caused a few days of the most intensely frigid atmosphere experienced in the same month of many years. The days passed away uneventfully and much similar to all other days of the winter season in this region. Many farmers visited the neighboring villages and the merchants had a large trade, practical evidence that the times are fairly good and money in circulation, despite the drought and failure of the crops. No farm work in progress beyond what is actually necessary; a veritable time of rest with most farmers. A perusal of the current literature of the day is the principal occupation, and in this recreation the RURAL WORLD forms a large factor. The metropolitan daily papers team with the usual holiday casualties, configurations and episodes, some of which make rather uninteresting reading matter. A happy and prosperous year through 1902 for the RURAL WORLD, its able editor and assistants, correspondents and many readers is the heart-felt wish of D. P.

### WHAT THE BOOKS SHOW.

Editor RURAL WORLD: The stormy weather during the past week has given me the opportunity to post up my books, square up with my neighbors and the farm and different fields and crops. I find that in spite of the dry weather the farm has yielded a margin above expenses. While some crops were a failure, and there is loss where we anticipated gain, yet in the final round up we are ahead. I am making an inventory of the farm, stock, implements, etc., to be completed Jan. 1, 1902, and shall try to do the same the first of each year, as long as I am able to run a farm.

C. A. BIRD.

Vernon Co., Mo.



Mothers will find "Mrs. Winslow's Soothing Syrup."



# Horticulture

A TRIBUTE TO JUDGE MILLER.

Editor RURAL WORLD.—It was with deepest sorrow that I learned through your columns of the death of our beloved friend, Judge Samuel Miller, of Bluffton, Mo., and as I looked upon his likeness I could not help recalling the pleasant visit I had with him in his home among his trees and plants.

I shall ever cherish his kind advice and fatherly words of encouragement he gave me. With thousands of other RURAL WORLD readers, I will miss the dear old gentleman's Horticultural Talks, which for years have been the first thing looked at on receiving the paper.

We should be thankful, though, that such a man has been spared to a ripe old age, and has been able to do such a work as his has been. For he has been a word, work and pen ever been a faithful servant of the cause of Horticulture. And next spring there will be many horticulturists able to say, when looking upon a beautiful orchard all laden with bloom, that they owe their success largely to the writings of this patriarch in the work. Surely he has reaped for himself a monument in the hearts of the people that is much more to be desired than the costliest shaft.

As I turn through my scrap book made of the writings I have saved from his pen as published in the RURAL WORLD for the last twelve years and I want to say I value this book very highly, not only because it came from his pen, but as a reference book I see many things that I believe would interest the readers. So allow me to quote a few lines from a paper read by him before the Missouri Horticultural Society Dec. 7, 1897. He said "Horticulture has its ups and downs like everything else, but if there is any occupation in life that gives more pleasure I have not been able to discover it. Soon my time will come to be ferried over the dark stream, but one of my last wishes will be that this noble pursuit of horticulture will receive the attention it deserves." Let us as RURAL WORLD readers see that, so far as it is in our power, his wishes are carried out.

I am also much impressed with a piece entitled "A Tribute to Judge Miller," written by Robt. C. Morris several years ago, in which he says: "No columns of the RURAL WORLD contain better council and wiser words than those to be found on the horticultural page. It touched my heart, a little to read these words in a recent issue from dear old Samuel Miller. There are times when I feel despondent and wonder why I am meddling with these things. Some men mistreat their fellowmen to gain riches and then spend thousands of dollars to erect a monument out of material substances that the tooth of time will finally gnaw into dust. But this dear old practical philanthropist is building a monument in the hearts and out of the affections of his fellowman that will stand as long as time lasts. His monument is being built of enduring substances. The trees, fruit and flowers are emblematical of immortality. They have in them qualities that live again. Their influence softens the heart, broadens the mind, cultivates the intelligence, develops the passions of the beautiful, feeds the pure, better tastes and lifts men up. The dear children Judge Miller speaks of, who will find in their pick up the nuts, will find in after years that they picked up with them a blessing—a bud that will grow into character. The child who picks the cherries, strawberries, peaches, grapes and flowers that were developed through the labor and painstaking care of our friend will, unconsciously, receive a quality that was put into them by this careful, conscientious man. They will pick 'the best of its kind.' That ambition to have the best of its kind will shape the character of thousands of these buds of promise—the little ones. It is only the material part of our friend who feels the degrees of cold weather. The glow of inspiration that warms his heart; illuminates his mind and drives his will power keeps him 'going about doing good.' This holy warmth increases day by day. This 'adam' has faithfully 'kept the faith,' and when the peering gates open for him the dear children will be with him with their welcome, and God's blessing will be his home greeting. If every one who is made the better for such a useful life could throw a pure white rose upon the mound that will finally cover him, it would look like a mountain of snow. Snows do not melt, and neither will his worth and his good deeds. His worth will live to-day in every regenerate heart. The judge can't know us all, but our love for him is none the less pure. We grow despondent because we come so far short of measuring up to his standard of doing good to others. May his years of usefulness be extended until 'another day to wear his mantle.' S. W. MOORE.

Elwell, W. Va.

## HORTICULTURAL TALKS.

**PECAN INFORMATION WANTED.**—A Kentucky reader of the RURAL WORLD, Mrs. Mollie Crice, writes that with repeated efforts she has not been able to get pecans to germinate when planted, and wishes information as to their treatment.

In reply, will say that the pecan, like all other nuts, must not be allowed to get very dry, or it will not grow. Therefore the nuts must either be planted in the fall, where they are to remain, or be kept moist over winter and placed permanently in the ground in the spring. The latter is preferable, for when put in the open ground in the fall they are liable to be found by mice or squirrels. When planting them out in the spring it is a good plan to place several near together. If these all grow it is an easy matter to destroy all but the strongest one. Pecan trees can be successfully transplanted if done while trees are small.

**SUCCESSFUL WINTER PLANTING.**—Several years ago on this day, Dec. 24, a pear orchard of 80 trees, mixed varieties, was planted at my old home. Not one tree failed to grow, and the orchard is in fine shape to-day. Trees may be planted at any time while in the dormant state with good results, providing conditions are favorable and the work is properly done.

**THE LE CONTE PEAR.**—This is an old variety, which, in spite of its faults, is well worth growing, both for home use and for market. When allowed to get thoroughly ripe it becomes mellow and is unfit to eat, but if gathered when firm it is unsurpassed for canning. The fruit is large and beautiful and always sells for the highest price when well grown and properly marketed. Le Conte being a very

important grower, is naturally subject to blight, but if planted on its own roots, trees are very rarely entirely destroyed. They kill back, and before you know it are up again with a crop of fine fruit. I would plant Le Conte on its roots in preference to Kieffer.

**STOP TO THINK.**—Don't think that because a certain party has made big money by growing a certain kind of fruit in a particular locality that you can go ahead and do the same. In the first place, that man may have a better knowledge of how to care for and handle that crop than you, though the main consideration is that the climate and soil conditions may be vastly different with you and the facilities for marketing not so good. As a rule it does not pay to invest much money in anything with which you are not thoroughly familiar.

**PEACH BUDS KILLED.**—A temperature of 17 degrees below zero seems to have been too much for peach buds. A thorough examination to-day shows that buds are practically all killed. Sweet cherries and some varieties of plums suffered, but still show some live buds. Growers, in general, will not mount the loss of the peach crop. We have had them several years in succession, and to do without them for a year or two will make them more appreciated when they come again. It will also have a tendency to change your method of pruning the tree over the tree. Of course, terminal twigs at the end of limbs must be left, in order to encourage trees to grow larger. It will pay to take out all old, exhausted trees and replace them with good, thrifty young ones.

**THE FAMILY KITCHEN GARDEN.**—Whenever a well-planned, well-cared-for vegetable garden is to be found it is invariably considered by its owner the most valuable crop, comparatively speaking, on the farm. Don't neglect the garden, but endeavor to improve it a little each year. EDWIN H. RIEHL, North Alton, Ill., Dec. 24, 1901.

**SPRAY CAR EXHIBIT AND FARMERS' INSTITUTES.**—Editor RURAL WORLD.—Beginning at West Plains, Monday, Dec. 16, Prof. John T. Stinson, director of Missouri Fruit Experiment Station, of Mount Grove, Prof. L. J. Hall, Assistant State Superintendent of Schools, and G. W. Waters, head of the Missouri Horticultural Society, made, then an institute session was held. From 1 to 2 p. m. continued car exhibit, then another session of institute, another session also at night. This program was presented at West Plains, Willow Springs, Cabool, Mansfield, Seymour and Rogersville, at each of which places we had good attendance, very good considering the weather, which was cold throughout except on Saturday, when the mercury got above zero. The fruit growers and farmers expressed their approval of the plan. In several cases persons came distances of ten to twenty miles to the meetings. One man from a fruit-growing district said that he had been well paid for his trip and considered it worth it to him. The discussions were of an informal character, and the experiences of fruit growers and farmers were given for the benefit of all.

Since this plan of holding institutes has been published, Director Stinson has received many letters from prominent fruit-growers, urging him to visit their districts, which was cold throughout except on Saturday, when the mercury got above zero. The fruit growers and farmers expressed their approval of the plan. In several cases persons came distances of ten to twenty miles to the meetings. One man from a fruit-growing district said that he had been well paid for his trip and considered it worth it to him. The discussions were of an informal character, and the experiences of fruit growers and farmers were given for the benefit of all.

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## THE LATE A. NELSON.

At the late meeting of the Missouri State Board of Agriculture the following preamble and resolution were adopted: Whereas, it has pleased our Heavenly Father to remove from among us one of our number, the Hon. A. Nelson, of Lebanon, Mo., one of the most earnest horticulturists of the state, a man thoroughly devoted to his duties as a member of the Board of Agriculture and to the state's material development; therefore be it

Resolved, That we hereby express our sincere condolences to his family and regret that Providence in his wisdom has seen fit to deprive us of his counsel and assistance, and further recommend that a copy of this resolution be sent to his family and also spread upon the records of this board.

## HOW TO DESTROY CATERPILLARS.

Editor RURAL WORLD.—The best time to destroy caterpillars is in the winter, when the leaves have dropped off, or early in the spring before the trees leave out, as at these times they can be seen best. I find it best to do this work on the east side of the trees in the forenoon and on the west side in the afternoon, thus avoiding looking toward the sun.

The caterpillars form their rings of eggs on small limbs, usually within a foot or so of the ends. These are easily cut off with a pair of clipping shears. To reach the higher limbs a ladder can be made with the lower end about three feet wide and the upper end brought to a point so it can be pushed through the limbs. Also long handles can be fastened on the shears.

This ring of eggs is about three-fourths of an inch long and a third of an inch in diameter. Being larger than the twigs, they can easily be seen after a little practice. This work should not be neglected.

Vernon Co., Mo. JACOB FAITH.

## EXCERPTS

From addresses before the late meeting of the Central Illinois Horticultural Society.

Editor RURAL WORLD.—There were many good things said at the recent meeting of the Central Illinois Horticultural Society held in this city, and as I think a good public service would be rendered by placing more of such matter before the readers of your paper, I herewith send some choice excerpts, which I am sure will prove to be very interesting:

"Land Values and the Possibility of Development in Agriculture" was the subject of an address by George T. Powell, of Briar Cliff Manor, N. Y., president of the School of Agriculture. He said: "An important line of work that gives promise of value is the origination of varieties adapted to the conditions where the fruit is to be grown. We have orchards full of disease, bearing fruit of inferior quality, because varieties are planted that are not suited to the soil and other conditions where they are grown. Through hybridization there are great possibilities of getting new and more valuable varieties that are better suited to difficult and widely varying sections where orchards are being planted on a large and commercial scale. Not far in the future, nurserymen will recognize this principle in propagating trees. A very few are already adopting this method, others will soon follow and orchardists will be able to buy trees so grown in the nursery.

Trees having been selected and grown upon this improved method, the management after planting becomes highly important. In a large majority of instances, clean cultivation of the soil will prove better. To the want of cultivation more than any other cause, may be traced the great amount of inferior fruit that is found in our markets. In most uncultivated orchards seldom above twenty per cent of strictly fine number one apples can be barreled; sixty per cent will run number two, while twenty per cent will be unmarketable. When cultivation is given, it should be done by blowing very lightly, at the earliest opportunity in the spring, then keep the ground frequently harrowed up to July 10 or 15, when a clover crop should be sown for the good of the soil and of the trees during the winter months.

I have used with great success, crimson clover for this purpose. Crimson clover is an annual plant and for this reason it grows quickly and will make a better cover than the common red clover when sown as late as the middle of July. Where the crimson clover will not thrive, Canada peas will do well and be of value. The renovation and improvement of the soil through the use of clover or peas, may be obtained very economically. I believe it is possible to continue and to increase the production of the soil for generations to come, and by the aid of clover and other leguminous plants to add more nitrogen than will be taken from the soil by the crops grown.

**FRUITS AND VEGETABLES.**—Their Hygienic and Economic Importance, presented by Mrs. H. M. Dunlap of Bayou, Vice-President of the Illinois Association of Domestic Science.

The carrot is a vegetable but little used by the American, but can be found almost a daily accompaniment to the Frenchman's dinner. Carrots contain sugar enough to permit syrup from them. Starch does not enter into their composition, but a small portion of pectone being found instead. Iron is said to be the mineral of greatest value found in the carrot and gives it its color.

The parsnip contains but little nutritive value, mostly starch and sugar, with one per cent mineral matter. It should be handled with care in cooking and serving, as the fibrous matter contained therein makes it difficult of digestion.

The best, owing to the amount of sugar it contains, is considered more nutritious than any other esculent tuber except the potato. Celery contains an aromatic oil, sugar, mucilage, starch and mannin sugar. The daily moderate use of celery is said to remove nervousness and even palpitation of the heart. For rheumatism and kidney troubles it is considered excellent. Those having weak digestion should eat celery cooked, as the fiber of celery makes it difficult of digestion.

The onion, belonging to the same family as the garlic and leek, is classed among the vegetables of value as a blood purifier; it stimulates the secretions, and like celery, is useful for nervousness. The strong taste and smell of onion is due to a volatile oil, rich in sulphur.

"Cabbage, if properly cooked, is a valuable vegetable, possessing marked antiscorbutic virtue." "Hippocrates, the Father of Medicine, considered the cabbage one of the most valuable of remedies. Erastus deemed it a valuable remedy against paralysis. Cato, in his writings, claimed it to be a panacea for all diseases



Small crops, unsalable vegetables, result from want of

## Potash.

Vegetables are especially fond of Potash. Write for our free pamphlets.

GERMAN KALI WORKS, 93 Nassau St., New York.

and believed its use made it possible for the Romans to do without the use of physicians for 800 years, they having expelled them from their country for fear of length of time." M. Chevreul, a French scientist, says the odor caused by the boiling of the cabbage is due to the liberation of sulphuretted hydrogen. Cabbage can be cooked so that this principle will not be liberated and will remain as an aid to its digestion. If put on in boiling salted water and allowed to simmer, never boil, from one-half to three-quarters of an hour, drained and served, either with melted butter or cream sauce poured over it, even those of weak digestion can indulge in its use.

All vegetables are composed of cells surrounded by woody fiber, and rapid boiling toughens the fiber and ruptures the cells, dissipating into the water and air many of the principles that should remain as food. Spinach, called by a French physician "the broom of the stomach," is considered a blood and complexion beautifier, and should be found upon our tables often than it is. The health of the Frenchman, I believe, can be attributed to his use of vegetables twice a day, and especially to his salad with dressing of oil and lemon juice or vinegar. Twice a day during my entire stay in Paris I had the pleasure of eating a salad, and such salad as only the French know how to make, by the perfection of growth of the vegetable required and the manipulation of material that brings perfection to the complete product.

Lettuce, endive, chicory, upland cress, and corn salad should be found among our garden products. Lettuce is used for the delectable and health giving salad. There is something radically wrong with the Americans' dietary system when disease is so rampant among us. We find rheumatism, gout and kindred diseases, not confined to those of middle life and the aged, but affecting the young as well. When young girls of 12 and 14 have rheumatism and boys of 12 have gout, it is time we looked to the cause of things. We need to study the science of prevention more than the science of cure. Our excessive eating of sweets, meat and starch, with not enough of the elements found in the fruits and vegetables, is one of the causes of so much rheumatism, gout, kidney and liver disease. We are more physicians, according to our population, than any other nation, and they are not a poor or poverty-stricken class of people either. They usually have homes among the best and are prosperous through our ignorance and abuse of ourselves. I wish we could change our methods of living, so that a part of our doctors would have to begin the raising of fruits and vegetables to supply the demand created by the new way of living.

In the editorial department of "Good Housekeeping" for November they make this statement: "Several life insurance companies in this country, England and Germany are offering reduced premiums to vegetarians, about eight per cent reduction." If true, they are grasping the hygienic value of a diet of vegetables. A wholly vegetable diet may not be advisable, but a restricted diet of meat and sweets would certainly tend towards a higher standard of health and happiness for the American people; and so, horticulturists of Illinois, I plead with you to consider your occupation second to none, for with you rests the supply of whole, sound fruits and vegetables. You will have much to do with molding public sentiment towards their value as food by placing them in all their beauty and perfection of growth, in an attractive manner in our markets and studying always to increase their variety and quality.

JAMES HANDLY, Quincy, Ill., Dec. 21, 1901.

## The Apiary

BEEKEEPING FOR A FARMER'S WIFE.

Every farmer's wife appreciates pin money, especially in spring and summer. She wants a new bonnet, but the good husband—well, sometimes may think as I do about that time, "Just dead broke." Or perhaps it is not the right time of the year to sell hogs or corn, and then you see some coaxing. Then the good husband thinks, "What there was to earn pin money for you women folk."

Interest the good wife and daughter in beekeeping. Buy a hive or two of pure Italian bees, by all means in modern hives, writes Fred W. Muth in Modern Farmer and Busy Bee. Nothing on the farm brings such big returns for little labor and money invested. Perhaps I hear you say bees, nay, may; they have stings that hurt. Take my word, they are not so bad as you think. If by chance you do get stung, always scratch out the stinger; never rub or pull it out, as then you push the poison in the skin and that is what hurts. For a small sum of money you can buy a veil to protect your face, and gloves for your hands, thereby you avoid being stung. I don't believe in mind over matter, but when I get stung, one scratch and on I go, next minute I forget I was stung.

Don't produce comb-honey; produce extracted. It's easier. You get three times more with one-third the trouble, and sell it at same price.—(Ed.)

When I was a boy at school I spent my vacation on a farm. We had 20 stands, and produced only extracted honey. The summer in question was a

good year. During the honey flow father was too busy at home, and I was the bee-keeper. I extracted over 200 pounds in three weeks. We stored it in two big tanks in the work shop. One day while at the town near by I happened to drop into the little newspaper office, for I knew all of the boys in there. During the course of conversation I related my experience to the editor. Behold, the next day he gave me quite a write-up. You ought to see the honey I sold after that! They came in—ladders, buggies, farm wagons and even log wagons, with milk pails and other pails. It was then threatening time, money plentiful, and honey all sold in a few weeks. You ought to have seen my pockets, chock full of money. Then father came out, after the busy time was over at our home. He was simply astonished at my work.

You can do the same at your home. Everybody likes honey. When you have plenty, be liberal; it pays. Make your neighbors a present of a small glass. Insist on every person tasting while you are with them. Put out a sign on the fence, "Honey for sale here," and with a little effort you will be surprised what pin money you will make.

## USEFUL BUMBLE BEES.

It was Darwin who made the statement that a crop of clover seed depended upon bees. Most farmers think a good crop of clover seed depends upon a dry season, writes a correspondent in the "Central Farmer." We have been thinking about this matter and our conclusions are as follows:

Inasmuch as red clover would not seed in Australia until bumble bees were introduced, we lay it down as a fact that bumble bees are serviceable in fertilizing the blossoms and a better crop results. We claim, however, that a dry season is essential to a large crop of clover seed of good quality, but does the dry season affect the crop directly or indirectly? We reason, again, that bumble bees build their nests on the ground and thrive better in a dry season than a wet one; hence, the dry season makes a large crop of bumble bees and the bumble bees make the large crop of clover seed. Now, as to Darwin's claim that cats are responsible for a large crop of clover seed. We have concluded that bumble bees build their nests on the ground. We also know that field mice are fond of bumble bee honey and destroy the nests, and cats are fond of field mice. Therefore, we arrive at the conclusion that cats are a good thing to have if you raise clover seed, and we will in the future protect the bumble bees and do all we can to increase their number. We have been wondering whether they could not be domesticated, or possibly a race of honey bees raised up that could extract the honey from red clover blossoms and thus be instrumental in performing the fertilizing act. Also, it is quite evident that the farm or locality where bumble bees are present will be a good place to grow clover seed.

There are many more problems like this to be worked out on the farm, and we dare say that the farmer or gardener who in nature's processes recognize such interesting results will never find his duties irksome.

**How Strong Are You?** The dial of the punching machine won't answer that question. Strength depends on nutrition. When the stomach and other organs of digestion and nutrition are diseased, the body fails to receive its full supply of nourishment and hence grows weak. That is why no man is stronger than his stomach.

Dr. Pierce's Golden Medical Discovery cures diseases of the stomach and the allied organs of digestion and nutrition. The food eaten is then perfectly digested and assimilated and the body is made strong in the only possible way—by nutrition.

"I was troubled with indigestion for about two years," writes Wm. B. Barker, Esq., of Julietta, La. Co., Idaho. "I tried different doctors and remedies but to no avail, until I wrote to you and you told me what to do. I suffered with a pain in my stomach and left side and thought that it would kill me. Now I am glad to write and let you know that I am all right. I can do my work now without pain and I don't have that feeling that I used to have. Five bottles of Dr. Pierce's Golden Medical Discovery and two vials of his 'Pleasant Pellets' cured me."

Dr. Pierce's Pleasant Pellets stimulate the liver.

## We Pay The Freight

Our prices are right and show just what the goods cost you at your railroad station or Express Office. Read at once our New Descriptive Price List.

## NEW HAVEN NURSERIES

NEW HAVEN, MO.

BUY SEEDS THAT WILL GROW. 1. FERTILE SEEDS. 2. FERTILE SEEDS. 3. FERTILE SEEDS. 4. FERTILE SEEDS. 5. FERTILE SEEDS. 6. FERTILE SEEDS. 7. FERTILE SEEDS. 8. FERTILE SEEDS. 9. FERTILE SEEDS. 10. FERTILE SEEDS. 11. FERTILE SEEDS. 12. FERTILE SEEDS. 13. FERTILE SEEDS. 14. FERTILE SEEDS. 15. FERTILE SEEDS. 16. FERTILE SEEDS. 17. FERTILE SEEDS. 18. FERTILE SEEDS. 19. FERTILE SEEDS. 20. FERTILE SEEDS. 21. FERTILE SEEDS. 22. FERTILE SEEDS. 23. FERTILE SEEDS. 24. FERTILE SEEDS. 25. FERTILE SEEDS. 26. FERTILE SEEDS. 27. FERTILE SEEDS. 28. FERTILE SEEDS. 29. FERTILE SEEDS. 30. FERTILE SEEDS. 31. FERTILE SEEDS. 32. FERTILE SEEDS. 33. FERTILE SEEDS. 34. FERTILE SEEDS. 35. FERTILE SEEDS. 36. FERTILE SEEDS. 37. FERTILE SEEDS. 38. FERTILE SEEDS. 39. FERTILE SEEDS. 40. FERTILE SEEDS. 41. FERTILE SEEDS. 42. FERTILE SEEDS. 43. FERTILE SEEDS. 44. FERTILE SEEDS. 45. FERTILE SEEDS. 46. FERTILE SEEDS. 47. FERTILE SEEDS. 48. FERTILE SEEDS. 49. FERTILE SEEDS. 50. FERTILE SEEDS. 51. FERTILE SEEDS. 52. FERTILE SEEDS. 53. FERTILE SEEDS. 54. FERTILE SEEDS. 55. FERTILE SEEDS. 56. FERTILE SEEDS. 57. FERTILE SEEDS. 58. FERTILE SEEDS. 59. FERTILE SEEDS. 60. FERTILE SEEDS. 61. FERTILE SEEDS. 62. FERTILE SEEDS. 63. FERTILE SEEDS. 64. FERTILE SEEDS. 65. FERTILE SEEDS. 66. FERTILE SEEDS. 67. FERTILE SEEDS. 68. FERTILE SEEDS. 69. FERTILE SEEDS. 70. FERTILE SEEDS. 71. FERTILE SEEDS. 72. FERTILE SEEDS. 73. FERTILE SEEDS. 74. FERTILE SEEDS. 75. FERTILE SEEDS. 7



**PATENT GROOVED**  
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 Any size to fit any wheel.  
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**HAYNES METAL WHEEL CO.**  
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 We are the largest manufacturers of steel wheels and tire wheels in the U. S.  
 Write for Prices.

## Live Stock

### DATE CLAIMS FOR LIVE STOCK SALES.

January 21 to 24, 1902—Bathans' annual Criterium Sale, at Kansas City.  
 Jan. 14, 15 and 16—Cornish & Patten, Osborn, Mo., and others, at Kansas City, Mo. Hereford cattle.  
 Feb. 4, 1902—Biltmore Farms (Biltmore, N. C.) Annual Brood Sow Sale.  
 Feb. 11-13, 1902—Redhead Anstey, Boyles and others, at South Omaha, Neb. Hereford cattle.  
 March 4-7, 1902—J. M. Forbes & Son, Henry, Ill.; J. F. Prather, Williamsville, Ill.; S. E. Prather & Son, Springfield, Ill.; C. B. Dustin & Son, Summer Hill, Ill.; T. J. Wornall, Mosby, Mo., and others, at Chicago, Ill. Shorthorns.  
 March 11-12, 1902—W. F. Nichols, West Liberty, Iowa. Shorthorns.  
 June 19—C. E. McLean, Danville, Ind., at Indianapolis. Double Standard Polled Durhams.  
 The "National Hereford Exchange" under management of T. F. B. Botham, as follows:  
 March 25-27, 1902—Chicago.  
 April 22-24, 1902—Kansas City.  
 May 27-29, 1902—Omaha.  
 June 24-26, 1902—Chicago.

**ABERDEEN ANGUS CATTLE.**  
 Feb. 4-6—Combination sale, W. C. McGavock, mgr., Chicago.  
 Jan. 22—E. E. Axline, Oak Grove, Mo.  
 April 19-21—Combination sale, W. C. McGavock, mgr., Kansas City.  
 June 19-21—Combination sale, W. C. McGavock, mgr., Chicago.

**NATIONAL SHORTHORN SHOWS AND SALES.**  
 Feb. 18—At Chicago, Ill., George Allen, Allerton, Ill.  
 March 11 and 12—At Trenton, Mo., combination sale, H. J. Hughes, secretary.  
 March 19—At Kansas City; W. R. Nelson, dispersion sale.  
 March 20—At Kansas City; B. B. and H. T. Groom, Pan-Handle, Texas.  
 March 26—At Kansas City, Mo., Robinson Bros. & Wright.  
 May 8—At Columbia, Mo., Boone County Shorthorn Breeders' Association.  
 May 14—At Kansas City, Mo.; W. T. and H. R. Clay, Plattsburg, Mo.

## Veterinary

Answers to questions in this department are given by Dr. T. E. White, former State Veterinarian for Missouri, Sedalia, Mo. Write questions on one side of paper only, and separate from other business. Those wishing a written reply privately must accompany their requests with a fee of one dollar, the professional opinion being one of private advantage.

**AZOTURIA.**—Last spring I had a mare taken with azoturia or kidney trouble. After she got up it settled in her left hind leg. She seems to be getting better, but the leaders seem to be contracting and are shrunken. There is quite a sunken place just back of her stiffler. Jersey Co., Ill. P. A. BOWLER.  
 Azoturia is not a disease of the kidneys, as many are led to believe, because of the coffee-colored urine. The trouble is due to an accumulation, in all the tissues of the body, of an overabundance of nitrogen, which the animal is unable to eliminate. The disease is nearly always fatal, yet some cases do recover, but it is generally at the expense of some lesion or other left on the horse. It is possible that your mare may never be any better than she is now, but she should have been treated immediately after her recovery. However, try tincture of arnica, rubbing it in well with the hand about twice a day. Along with this give daily exercise. Do not drive her fast or pull any loads with her until next spring.

**DEHORNING ANGORA GOATS.**—I have some Angora goats that have very long horns, which I find very much in the way. Will it do to dehorn them? If so, please give any special directions necessary. W. D. MAYFIELD.  
 Washington Co., Ark.  
 There seems to be no good reason why the dehorning of a goat should not be as successfully done as in the steer, especially if the animal is taken when young. In the aged goat there is this difference to encounter: In cattle there is some little space for the horns to grow, while in aged goats there is none; as a consequence, the operation would practically take off the top of the head, making a wound which, it is doubtful, would ever heal entirely over. The care of the horn, in a very young animal, starts as a button or nodule. This button can be moved to and fro with the fingers; and by the button becomes permanently attached to the skull and becomes the horn core; as it keeps on growing it pushes the skin before it, forming, as it does so, the horn matrix, and from the matrix grows the horn; consequently in dehorning no part of this matrix must be left on the skin or a fresh horn will start to grow. To perform the operation properly always be sure to take at least a quarter of an inch of hide away all around with the horn, using a butcher's meat saw to amputate the horns.

H. A. BARBER, breeder of Shorthorn cattle, Windsor, Mo., writes: "We are having some very severe weather—45 degrees below zero—but our stock is all looking well and I think we will have plenty of feed to carry all the stock through the winter in good shape. My Shorthorns are looking well. I have quite a number of excellent young bulls for breeders to select from."

**Make Cows Breed**  
 Hood Farm Breeding Powder does it. Write for circulars telling how to use. It is a sure remedy for failure to breed, failure to clean, irregularity in coming in season.  
 By mail, \$1.15. Four times larger size to any railroad express point in U. S., \$2.75. C. L. HOOD & CO., Lowell, Mass.

### COTTON SEED HULLS FOR CATTLE.

Editor RURAL WORLD: Perhaps few of your readers know of the value of cottonseed hulls for roughage for cattle, old and young. While living in North Carolina we learned of this feed. It is used by the milkmen supplying the towns with milk, but if fed to a considerable extent we found it spoils the grain of the butter. The flavor of the milk was as good and it was as rich as when hay was fed.

At first we were afraid to use hulls, fearing the fibre left on the seed would cause trouble and wrote to the manager of Pinehurst concerning its use in their dairy of 30 cows. He replied that he considered it a very valuable feed; had used it with good results for several years. We also obtained a circular, giving the analysis of cottonseed hulls, timothy hay, etc., and found that the feeding value of the hull was nearly equal to that of timothy hay. Hulls were \$2 per ton; hay \$30; so we decided to try the hulls. Aside from their value as feed they are said to contain \$3 worth of potash per ton, so we felt we could lose nothing by getting them. At first the cows would not eat the hulls at all. We lessened their hay ration and mixed a few hulls in with the bran, gradually increasing the amount of hulls and dropping off hay. In two weeks we fed only a small amount of hay at noon and a few days later stopped feeding hay altogether. In the spring the cows were sleek and in fine condition. We always fed bran and cottonseed meal with the hulls, mixing the grain thoroughly with as much of the hulls as they would eat. The second year's feeding confirmed our opinion of the value of the hulls for cattle. Young stock will grow and keep in fine condition on hulls with a small grain ration. I do not think stock will winter well on hulls without some grain or cottonseed meal, as they probably would not eat enough of them. To much cows we fed six quarts of bran and two quarts of cottonseed meal; to dry cows, two quarts of bran and one quart of cottonseed meal, and one pint of cottonseed meal daily, with what hulls they would eat, always giving salt frequently. Our cows gave fair returns in milk, the young stock made good growth and all were sleek and in fine condition in the spring. M. F. HOPKINS.

### THE KANSAS CITY HEREFORD SALE

January 14, 15, 16, 1902.  
 ENGAGE YOUR ROOMS.—Parties contemplating attending the combination sale of Herefords at Kansas City Jan. 14, 15, 16 will do well to engage their rooms in advance as at that time an implement dealers' convention is in session and from 2,000 to 3,000 out-of-town visitors are expected. Reduced railroad rates from the territory embraced by the Western and Southwestern Passenger Associations will also be in effect, the rate being one fare plus \$1 for the round trip. Tickets will go on sale early enough to allow you to attend the first day's sale. Inquire of your nearest railroad agent concerning this.

J. A. LARSON, Everett, Kas., says of his consignment for this sale: "My offering is one heifer and three bulls. The heifer is a 2-year-old and a large, thick-fleshed daughter of Hesiod 26th. She was bred last May to March 10th, the bull that sold in the recent Armour-Funkhouser sale for \$700. The three yearlings are by Chester 7075, a son of imported Chesterfield." Mr. Larson raises good cattle and four of them are in this sale.

JONES BROS., Comiskey, Kas., say: "The cattle we offer are all good vigorous animals that have not been overfed, and we believe will prove to be good investments for their purchasers. Sir Benjamin, by Wild Tom, is a 4-year-old bull that has done remarkable service for us during the two years we have used him, and we only offer him now as a 2-year-old. Another bull is by Lincoln 20, the first prize 2-year-old bull at Kansas City in 1899. Two of our heifers are also in calf to Lincoln 20, and several of them are sired by Sir Benjamin."

**THE ARMOUR CONSIGNMENT** of eight cows are all from the Armour importation landed in Baltimore in October. The cows Letty and Marian are by Argon. In fact, Marian is a full sister to the bull Majestic, brought over to head the Armour herd, and said to be the best herd bull in England. Letty is bred very much the same. Her breeder, J. W. Smith, has sent over many of the good things in the Armour importation and his herd was drawn on very largely for this one. Rebecca is from the breeding of George Pitt. Her sire, Cecil, is a full brother to Clarence, who has been so successful in the former Armour importations. Rosette is by John Bull, the sire of many calves in former Armour importations, and one of the most frequent sires in service in this one. Caroline is by Batesman, who will be remembered as Arthur Turner's bull, and whose heifers have brought such wonderful prices both in England and America. Rosamond is by Iron King at the head of E. L. Heygate's herd, and said to be an unusually good sire. Gem 4th is by Hopeful III. These cattle will not be in high condition, but in a general way are typical of the recent importation, outside of the distinct show stuff. LOWELL, BARROLL & DE WITT, Denver, Col., who own over 40 head of registered Herefords, will consign these eight in service in this one. The foundation of their present herd is the old Ridgewood herd, formerly owned by the late C. N. Whitman, which was located near Leavenworth, Kas., and was moved to Colorado something over two years ago. In past years this herd made quite a conspicuous display in the show ring, and has been immensely improved in its quarters and under its present ownership. The Lord Wilton blood largely predominated among the cows of this herd, which have for a long time been crossed on Anxley, The Grove 3d and Hesiod bulls. Three years ago the famous imported Randolph 1868 and imported Southern 7538 were placed at the head of the herd. Later on Tom Beau Monde, a son of Wild Tom, and Beau Donald 17th were added to the herd stock. Hesiod 30th has been in service in the herd for some five years. Eastern breeders who have visited this herd express astonishment at the greatly improved condition of the herd and the splendid young animals this firm is raising. It might be well in this connection to call the attention of

the range trade, especially to the number and quality of the bulls offered in this sale. This feature is one that should attract bull buyers, for it is doubtful if a better opportunity will be offered during 1902.

### A GOOD POLLED ANGUS HERD.

R. S. WILLIAMS, Liberty, Mo., has a herd of Aberdeen Angus cattle that promises to become one of the noted "doddle" herds in the country. Mr. Williams is a young man, and consequently has had but few years of experience in the breeding business, yet he has already won a good measure of success. He gave himself the advantage of a good start. His initial purchase consisted of the bull, Mindon 3172, bred by Mr. Hugh Elliott, and sired by the now celebrated breeding bull, Polar Star. Mindon cost him an even \$150. He was followed by the purchase of a few females and, to date, Mindon has to his credit more than \$2,000 of his produce that have already been sold. In order to get a bull qualified to follow Mindon, and especially to mate with his daughters, Mr. Williams took considerable pains to locate one which would just suit him and finally purchased the Zaire bull, Zaire 17th 4053. He got him from his breeder, Mr. M. A. Judy. He was got by Emulus 2947, dam Zaire 12th 2643, she by Black Monk, out of Zairida 12 by Rougemont, a son of the famous Young Viscount. This Zaire bull has long been a favorite with Mr. Judy and, in speaking of and recommending this bull, Zaire 17th, he said: "He is a bull with exceeding finish and smoothness, excellent scale and fleshing propensities, which, together with his choice pedigree, make him a bull no breeder need hesitate to place at the head of his herd, even though he may have the best lot of cows in the land. His dam is a full sister to Zaire 5th, champion cow over all breeds in 1897, and his sire represents the best blood of all Ballandalloch, the world's greatest breeding establishment." With such a recommendation from Mr. Judy, and the fact that Mr. Williams selected him to cross with the daughters of Mindon, is certainly sufficient compliment for any young stock bull.

In selecting cows Mr. Williams was again careful to get stock from reliable breeders, such as Messrs. R. B. Hudson, Hugh Elliott, C. H. Gardner, M. A. Judy and J. R. Shepherd. The cows represent such families as the Easter Tulloch, Caroline, Shempton Duchess, Eria, Mina, Barbara, Drummin Flora, Drummin Grace, Princess Gypsy Flower, etc. We were shown recently a promising bunch of young bulls, mostly got by Mindon. The best of the older ones of this lot has been named William Turpin. He was sired by Moss Creek Knight 4th, a grandson of Imp. Kabul by Young Viscount. His dam, Mascot 3d of Swan Lake, is an own daughter of Imp. Kabul, giving this yearling bull a double cross of Imp. Kabul, which has been conceded to be one of the very best bulls sired by Young Viscount ever brought to this country. These young bulls are a blocky, low-legged, promising lot of youngsters such as Mr. Williams has heretofore found quick and ready sale for. William Turpin is now ready for service and is being priced well within the reach of any breeder or farmer wanting a choice bred young Angus bull. We were also shown a group of yearling heifers and heifer calves, mated to the bulls above referred to, that are the kind Mr. Williams takes considerable pride in showing to those who visit his herd. One of the best of the yearlings was a full sister to his former herd bull, Mindon, making her daughter of Polar Star and the cow, Mingie, now owned by Mr. Williams. A bull calf recently dropped on the farm, with which Mr. Williams takes especial delight, was sired by this year's champion show bull, Rosegay, a son of Gay Lad. The dam of the youngster is the fine young cow, Gardner Annie. A splendid young cow, named Rosegay, was also shown. She is a daughter of the yearling bull that attracted our attention was "Pivy Belle, a daughter of Black Magic (full brother to Black Monk), dam Pivy Magna by Abbottford. She is the mother of a splendid yearling heifer sired by a calf got by Black Monarch of Kerron.

Mr. Williams aims to have stock on hand for sale at all times and just now is offering a bunch of young bulls, and would also spare a few splendid young females. He is his own herdsman, is at no extra expense in handling his cattle and is, therefore, enabled to sell them at quite reasonable prices.

### MARKETING POOR CATTLE.

The heavy marketing of cows and poor quality stock from the Southwest this fall, and the comparatively light supply of steers coming to market, has occasioned considerable comment from the uninitiated. Canning stock has been exceedingly plentiful all fall, owing to the unusually large supply of drouth-blighted native cattle and this extra run of inferior Western stock.

Some of the bullish "talent" inferred that the large percentage of cow stuff and small supply of steers was due to the fact that the southwest ranges have become depleted through the excessive marketing of the past 12 or 18 months, and that now the cattlemen were down to the last ditch and were compelled to send in their stock stuff.

Such a condition of affairs is far from being the case, however. While the great southwest has contributed liberally to the market supplies for the past few seasons, the proportion of new stock has kept pace with the output, and no scarcity of steers can be noted in any particular section. The real reason for the heavy marketing of the thin end of the owners' holdings and their cow stock, is that the ranchmen propose to eliminate all risk during the winter months, and accordingly are sending their weakest stock to the markets, so that the holdovers during the winter, which will be liberal, will be the pick of the herds, and strong enough to withstand a severe winter.

So, if the spring time sees heavy consignments of range steers coming to market, no one need suppose that the country is overstocked with such cattle, and is depleted of stock cows. On the other hand, it will be an evening up of the situation, caused by the present liberal movement of cows—Drovers' Telegram.

# THE GREAT HEREFORD COMBINATION SALE, AT KANSAS CITY, MO., JAN. 14, 15, 16, 1902.

200 REGISTERED HEREFORDS  
TO BE SOLD AT PUBLIC AUCTION.

## A BREEDERS' SALE OF BREEDING CATTLE.

The herds contributing number jointly about 3,500 head of registered cattle, with an annual increase of 1,400 head. Many of the plums of the last three crops of calves will go to the highest bidders in this sale.

SALE WILL BEGIN PROMPTLY AT 1 P. M. ON TUESDAY, JAN. 14.

### CONTRIBUTORS:

Henry Ackley, Wellsville, Kans., 3 head.  
 Est. of K. B. Armour, Kansas City, Mo., 8.  
 Cornish & Patten, Osborn, Mo., 15.  
 E. A. Eagle & Son, Rosemont, Kans., 10.  
 Funkhouser & Ackley, Wellsville, Kans., 3.  
 Funkhouser & Larson, Everest, Kans., 2.  
 Benton Gabbert & Son, Dearborn, Mo., 25.  
 Jas. A. Gibson, Odessa, Mo., 6.  
 Gudgeon & Simpson, Independence, Mo., 10.  
 O. Harris, Harris, Mo., 9.  
 Jones Bros., Comiskey, Kas., 8.  
 J. S. Lancaster & Sons, Chandler, Mo., 10.  
 J. A. Larson, Everest, Kans., 1.  
 L. P. Larson, Powhattan, Kans., 1.  
 Lowell, Barroll & DeWitt, Denver, Colo., 20.  
 C. N. Moore, Lee's Summit, Mo., 6.  
 T. C. Sawyer, Lexington, Mo., 4.  
 Scott & March, Belton, Mo., 10.  
 C. A. Stannard, Emporia, Kans., 5.  
 Steele Bros., Belvoir, Kans., 12.  
 Stewart & Hutcheon, Greenwood, Mo., 6.  
 R. T. Thornton, Kansas City, Mo., 2.  
 N. H. Woolston, Sugar Lake, Mo., 1.

FOR CATALOGUE WRITE TO  
 C. R. THOMAS, Secy. 225 WEST 12th ST., KANSAS CITY, MO.

### Reduced Rates on all Railroads.

**PURE BRED BULLS.**  
 Prof. E. A. Burnett, director of the Nebraska Experiment Station says: "The extension of the pure-bred bull market depends upon the market price of beef. When the market price of prime beef is high, as it is at the present time, the price of pure-bred breeding bulls is high, but if the price of beef should decrease there would be a corresponding decrease in the price of bulls. It is likely that the price of fancy beef will be high for some years to come. Cattle of any sort must be sold at a price that will give a moderate profit above the cost of production. I would prefer to see a man sell 1,000 bulls at \$100 each than half the number at double the price."

The extension of the market for pure-bred sires receives its greatest stimulus from the prospective stimulus of the beef market. The area in which cattle are to be produced is practically all occupied. The land is not so extensive that cattle in some form cannot be raised with profit. There has been a great influx of pure-bred cattle into the range country. No quality stock from the Southwest this fall, and the comparatively light supply of steers coming to market, has occasioned considerable comment from the uninitiated. Canning stock has been exceedingly plentiful all fall, owing to the unusually large supply of drouth-blighted native cattle and this extra run of inferior Western stock.

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# The Clark Dispersion Sale —AND THE— Harness Combination Sale —OF— HEREFORD CATTLE

at Chicago, Ill., Tuesday and Wednesday, January 7 and 8, 1902.

Two great opportunities for the purchase of Hereford breeding stock.  
 On Tuesday, January 7, Thomas Clark of Beecher, Ill., will disperse his Hereford breeding herd, consisting of 60 head of prize winning cattle. Perfection, the grand sweepstakes bull at the recent International Exposition, together with many females in calf or with calves at side to his service, will be sold. Sale begins at 1 o'clock p. m.  
 On Wednesday, January 8, Messrs. G. W. Harness, Jr., W. L. Thomas & Sons, S. H. Godman, Clem Graves and six other Indiana and Illinois breeders will sell 76 head of Herefords. The herds represented are all good ones and the cattle to be sold in this sale are the "tops."

For Clark Catalogue Write THOS. CLARK, Beecher, Ill.  
 For Harness Catalogue Write G. W. HARNESS, Jr., Galveston, Ind.

**Gentry Bros. Cedar Vale Stock Farm**  
 SEDALIA, MO.

Grand Duke of Haverhill 1894, assisted by Waterloo Duke of Cedar Vale 1898, heads our herd of pure Bred and Bates topped, pure Scotch and Bone topped cows, the most fashionable females. Stock for sale at all times, at reasonable prices. Parties may visit at train. Farm two miles out. Telephone No. 30.

**SCOTT & MARCH, Breeders of Registered Herefords.**  
 BELTON, MO.

**ORTIZ FRUIT FARM, MEXICO.**  
 SHORTHORN CATTLE of pure Scotch, Bates and leading American families. BEEKSHIRES of leading families of the breed. English Setters and Scotch Terriers that have been winners at leading shows of this country. Stock of all kinds for sale. Visitors always welcome. M. B. GUTHRIE, Mexico, Mo.

**"Sunny Slope Herefords."**  
 TWO HUNDRED HEAD FOR SALE, consisting of 40 good cows 2 years old or over, 15 2-year-old heifers bred, 50 yearling heifers and 100 bulls from 3 months to two years old. I will make VERY low prices on any of the above cattle. Write or come to see me before buying.  
 C. A. STANNARD, Emporia, Kan.

**Registered Shorthorn Cattle**  
 AND POLAND-CHINA HOGS,  
 Bred and For Sale by H. A. BARBER, WINDSOR, MO.

**SHORTHORN BULLS FOR SALE.**  
 Foundation of herd mostly of Bates breeding, Scotch Topped. Herd headed by ORANGE DUKE 3rd, 185251.  
 Call on or address M. R. AMICK, WINDSOR, MO.

**HEREFORDS**  
 600 HEAD IN HERD. Gudgeon & Simpson, Independence, Mo.

**ST. LOUIS NATIONAL STOCK YARDS.**  
 THE LIVE STOCK MARKET OF ST. LOUIS.  
 Located at East St. Louis, directly opposite the city of St. Louis. Shippers should see that their stock is billed directly to the

**National - Stock - Yards.**  
 C. G. KNOX, V.-Pres. C. T. JONES, Gen. Mgr. L. W. KRAKE, Asst. Gen. Mgr.

**"BLACKLEGNE"**  
 Pasteur Blackleg Vaccine Quite Ready for Use.

This is in the form of a cord impregnated with the vaccine. Each dose is separate and applied with a special needle. The dose is hitched on to a notch in the needle and then inserted under the skin at the shoulder. The needle is provided with a detachable handle. Vaccination with "Blacklegne" is as rapid and easy as taking a stitch. There is no dissolving, or mixing, or filtering a powder; no injecting or trouble in measuring doses; no expensive syringe outfit.

**PASTEUR VACCINE COMPANY,**  
 Chicago, New York, Omaha, Kansas City, Ft. Worth, San Francisco.

**"JOE-HEAD" SHORTHORNS**  
 Is here; young stock of both sexes and all ages. Cattle of all breeds, including the best of the breed. W. H. H. Stephens, Hancock, Mo.  
**ATEST**  
**DEHORNER**  
 Every Dohorner Guaranteed  
 THOUSANDS IN USE.  
 Ask your hardware dealer for them or write M. H. BROWN & CO., Chicago, Ill.

**RIPLEY'S COOKERS.**  
 Sold from \$1.00 to \$10.00. Made of boiler steel. No rust or rot. Cooks in 10 min. Guaranteed to cook in 10 min. Used in 10 min. and to heat water in stock tanks. Will heat dairy room. Call for catalog and prices. Ripley Hardware Co., Box 41, Greeley, Ill.

**LUMP JAW, BLOOD WARTS AND TUMORS**  
 Cured without the knife. We guarantee a cure or refund your money. Used by stockmen all over the world. Correspondence solicited. 15 years & 100,000 bottles, prepaid. Can you afford to keep disease stock when this remedy will cure, and leave no scar. Send for circulars. E. J. CARVER, Box 16, Colo., Iowa.

**SHORTHORN CATTLE**—Foundation stock was blood known to the breed, and bred in the most approved strains, extra good young cattle and hogs for sale; write your wants; visitors welcome; farm adjoining town on R. C. P. Scott & M. Ry. A. W. OOK, S. Greenfield, Mo.

**CEDAR VIEW AND GROVE HILL SHORTHORNS.**  
 Gay Laddie 119,303 at head of herd. Young stock for sale. Call or write.  
 FOWELL BROS., Lee's Summit, Mo.

**Camp Creek Herefords**  
 Young stock for sale. Inspection invited. Call or write.  
 L. W. WHEATMAN, JR., Truxton, Lincoln Co., Mo.

**CLOVER LEAF FARM HEREFORDS.**  
 FROM the best imported and native strains. Farm managed by the members of the executive committee. Treasurer Gudgeon has been a member of the executive committee, and he is accused in the injunction of having carried the proxy votes of the members of the board in his pocket, and thus voted himself into office every year. The following specific charges are added against him: "Lending himself large sums of money belonging to the association at a lower rate of interest than that fixed by the by-laws; approving his own bond as treasurer; procuring at various expositions judges friendly to himself and friends; using his power to award premiums to his acquaintances; intimidating members of the association; failing to keep proper accounts and books, and permitting vouchers representing large sums of money to be destroyed or lost."

**Shorthorn Cattle,**  
 Berkshire Hogs, Cotswold and Shropshire Sheep. Bulls ready for service. Some choice hogs and 15 bucks for sale at reasonable prices. The pure Scotch bulls Violets Prince 145,647 and Golden Sympathy 151,656 in service.  
 JOHN MORRIS, Chillicothe, Mo.

**ENGLISH Red Polled Cattle.**  
 One stock of pure blooded and extra fine. L. K. HARRINGTON, Dorchester, Green Co., Mo.

**Shorthorn Cattle,**  
 Berkshire Hogs, Angus Cattle, Light Brahms and Golden Fleecing Sheep. Stock and eggs for sale. Call on or address J. J. LITTELL, Sturgeon, Mo.



## Horseman



H. Heinsman's Red Roy, by Red Heart, son of Red Wilkes, trotted a good race in November at the St. Louis Fair Grounds, obtaining a record of 2:24. Red Heart is a fine deal of speed and doubtless will become one of our great sires.

With ten new standard performers to his credit, Red Wilkes now has a total of 10 in that select circle or in that respect leads all living sires. The old horse, who is now 27 years of age, is owned at Belle Meade Farm, Belle Meade, N. J. Onward, who is a year younger, is a close second, with 10.

The latest figures credit Ashland Wilkes (2:17 1/2) with 20 new standard performers. The other leading sires are: Artell (2:12), 11 new ones; McKinney (2:11 1/2), 10 new ones; Allerton (2:09 1/2), 10 new ones; Direct (2:06 1/2), 10 new ones; Expedition (2:15 1/2), 10 new ones; Sphinx (2:20 1/2), 10 new ones.

Four trotting-bred horses from Warren Park, Terre Haute, Ind., were shipped to New York by express last week en route to Europe. They were bought of W. F. Hays, by B. Tappen, agent for Prince Smith of Vienna. There were two brood mares, Nemes by Nutwood, and Phoebe, and two stallions.

J. Malcomb Forbes had the misfortune to lose by death the trotting mare Ellipse (2:08 1/2), which he purchased at auction about a month ago. By the death of Ellipse the turf loses a colt by Pedigree. Mated with Mr. Forbes' stallions Arion and Blingon, the public would have looked for a colt of phenomenal speed. Ellipse was a chestnut mare foaled in 1890, and was by Artell (2:12), out of Flora McGregor, the sire of the champion trotter, Crepuscle.

There are now eight sires credited with having sired 100 or more standard performers as follows: Nutwood (2:18) with 165; Electioneer, with 160; Onward (2:25 1/2), with 158; Red Wilkes, with 158; Alcantara (2:23), with 148; Simmons (2:25), with 146; Wilton (2:19 1/2), with 145; and Corbett Wilkes (2:19 1/2), with 141. The three last named were added to this exclusive list this year. Of those sires, Onward, Red Wilkes, Alcantara, Wilton and Gambetta Wilkes are still living.

A western philosopher has written of the mule as follows: "A mule will live on one-half what a horse eats and do more work. A mule's working years are twice as long as those of a horse. When a mule runs off he always keeps in the road, whereas a horse tries to smash things. No one ever heard of a mule hurting anything in a runaway. In fact, the mule is so well behaved and industrious that people despise him and talk about him. You have heard him accused of being a vicious knacker, but when you hear of a farmer being kicked to death you will notice that a horse did it."

The first year of the new century was an exceedingly prosperous one for the light harness turf, and as a necessary result there was an active and healthy market for horses with speed, the market has been lively and breeders have had their full share of the general prosperity. This is the natural effect of the prosperity of the country, which is seen in all the great manufacturing, mineral and agricultural industries. The signs of the times are equally propitious for next year, and we believe that great as was the season of 1901, the coming season of 1902 will find the sport more prosperous and more popular.

"If farmers want to receive good prices for the horses they produce they must produce the kind that bring high prices. It does not pay to raise a horse that sells for less than a good steer will bring. Farmers must stop selling the best mares and breeding from the poorest. The cheap, underbred stallion must be avoided and colts must be given such attention that they will mature in perfect form. There is nothing the matter with the horse market," says Spirit of the Times, "except that it is bare of the best kind of horses, such horses as the farmers of the country bred a few years ago and sold at prices that made horse breeding profitable."

Under the rules of the National Trotting Association the time between heats best three in five, shall be twenty-five minutes; and the law is mandatory that "not more than two races shall be 'sandwiched' in the performance on one day." The object of the rule is to stimulate, not retard, action. Introduce three races with alternating heats, and the chances are, says Turf Field and Farm, that the time between heats will average more than twenty-five minutes. The extended periods of the rest will favor faint-hearted horses, and thus prolong each contest. If heats are promptly started at the expiration of twenty-five minutes we shall see the much-talked-of quick action of the running turf introduced on trotting tracks.

The career of Woodburn Farm for the breeding place of trotters will most likely be closed with the going out of this year. The entire lot of trotters, stallions, brood mares and youngsters have been consigned to Woodard & Shanklin's February sale. Woodburn is noted as the birthplace of many of the former great ones, and its passing is of more than usual interest to trotting-horse men. The place has been for years under the management of Lucas Broadhead, who is at the present time a director in the Kentucky

Trotting Horse Breeders' Association. Woodburn, while losing fame, has lost none of its beauty. It must not be imagined that the fences have fallen down and walks washed away at Woodburn because no famous horses have come from there during the last few years, for this is not true. The place is in fine condition, and looks as prosperous as in former years, judging from the buildings, roads and paddocks. One of the unique features of Woodburn is the breeding of Shetland ponies. The herd is small, but one of the finest in America.

There were twelve new additions to the 2:10 trotting list during the past season, and strangely enough five trace to George Wilkes and five to Electioneer, as follows:

WILKES.	
Chain Shot	2:06 1/2
Onward Silver	2:08
Dolly Bidwell	2:08 1/2
Corabella Belle	2:10
Dr. Book	2:10
ELECTIONEER.	
Dolly Dillon	2:07
Janice	2:08 1/2
Elesta (4)	2:09 1/2
Corabella Belle	2:10
Captor	2:10
The Two that have nothing to brag of	2:10
Onward Wilkes May Allen (2:09 1/2) and All Right (2:09 1/2).	

In all probability there will be a great change in the system of training running horses in the near future. A return to the good old methods is likely, which has already taken place in the trotting horse world. When Artell placed the 3-year-old mark of 2:12 at Terre Haute, there was rush to make fast colt trotters. Arion at once made the most wonderful of all 2-year-old records. Turning the pacers, but one example is needed to show how the theory of colt wonders was put in practice. Monroe Salisbury brought out Directly and gave the little colt a campaign which would have broken down a well-seasoned aged trotter. There were protests against early developments. Old trainers like Budd Debie and Warren D. Peabody complained, but it did no good. Mr. Debie used to say: "I have warned Senator Stanford that early development was not good for the turf, but then he comes back and says that Arion and Artell each sold for a small fortune. But there is one thing certain. A pacer will hold only so much water. You can turn it out all at once and the pitcher is empty. The price 3-year-olds seldom lowers his record."

The exportation of horses and mules from New Orleans during the past two years has been the largest of any single port in the history of the world during the same length of time. A report of the exports from the port of New Orleans to South Africa from October 1, 1899, to November 30, 1901, shows the total valuation of all horse and mule cargoes to have been \$13,483,652. This amount is equivalent of 1,400,000 head of cattle, or 1,400,000 head of sheep, or 1,400,000 head of pigs, or 1,400,000 head of goats, or 1,400,000 head of deer, or 1,400,000 head of antelope, or 1,400,000 head of buffalo, or 1,400,000 head of elk, or 1,400,000 head of moose, or 1,400,000 head of reindeer, or 1,400,000 head of caribou, or 1,400,000 head of bison, or 1,400,000 head of musk oxen, or 1,400,000 head of yak, or 1,400,000 head of zebu, or 1,400,000 head of oxen, or 1,400,000 head of cows, or 1,400,000 head of sheep, or 1,400,000 head of goats, or 1,400,000 head of deer, or 1,400,000 head of antelope, or 1,400,000 head of buffalo, or 1,400,000 head of elk, or 1,400,000 head of moose, or 1,400,000 head of reindeer, or 1,400,000 head of caribou, or 1,400,000 head of bison, or 1,400,000 head of musk oxen, or 1,400,000 head of yak, or 1,400,000 head of zebu, or 1,400,000 head of oxen, or 1,400,000 head of cows, or 1,400,000 head of sheep, or 1,400,000 head of goats, or 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# Home Circle.

NEW YEAR.

I saw on the hills of the morning  
The form of the New Year arise;  
He stood like a statue adorning  
The world with a background of skies;  
There were courage and grace in his  
beautiful face.  
And hope in his glorious eyes,  
"I come from Time's boundless forever,"  
He said, with a voice like a song.  
"I come as a friend to endeavor,  
I come as a foe to all wrong;  
To the sad and afraid I bring promise  
of aid,  
And the weak I will gird and make  
strong."  
"I bring you more blessings than terrors,  
I bring you more sunshine than gloom,  
I tear out your page of old errors,  
And hide them away in Time's tomb.  
I reach you clean hands, and lead on to  
the lands  
Where the lilies of peace are in bloom."  
—Ella Wheeler Wilcox in Poems of Pleasure.

THE NEW YEAR.

With mingled joy and sadness we stand  
on the brink of another year. At such  
times the disappointments and sad hours  
of life come unbidden into thought.  
Losses, trials, bereavements stand out  
as sentinels to warn that to live is not  
all of life, that friends and abundance  
do not always make us self-reliant and en-  
able us to develop character of such  
steering worth that the world bids us  
come up higher. It is well to remember  
the past. It is the blessed memories. If  
the old year has had its hours of bitter  
sorrow, has it not also had its times of  
joy? If the dear old friends live only  
in memory, have not hosts of new ones  
been enrolled in the new year that is  
now dawning?

While we dwell on tender memories and  
joys too sacred for stranger ears to hear,  
we are able to look forward into the new  
year with hope that difficulties may be  
surmounted and that hard places will be  
made more easy. How much of the twinge  
is taken out of our disappointments in  
our ability to build our castles. The one  
who keeps sweet despite the severest af-  
fliction is the one who wins. Though all  
temporal blessings be ours, if we acquire  
the bitter disposition that oft comes with  
acquired means gotten by a strenuous  
life lived alone for getting money, we  
have gained but little.

If the motto "keep sweet" could be ours  
for the new year and lived in spirit, would  
not the world be vastly better for our liv-  
ing in 1902 than if dollars were acquired  
that only made us selfish?

New and better things are more than a  
promise for the farm home. Our mag-  
azines and even our Sunday papers are  
making the description of the farm home  
life more prominent. They make an article  
giving an account of a successful farm the  
leading feature of the issue which con-  
tains it. The city children are being  
taught that there is beauty in the coun-  
try. Then our schools of domestic econ-  
omy are considering many phases of the  
farm home life. These are the signs in  
the rainbow of promise that many condi-  
tions will be modified which now exist in  
rural homes, and which make its labors  
for the mothers and daughters many  
times almost too heavy. These are in-  
spiring New Year thoughts, and it is a  
privilege to have a part in the establish-  
ment of these better things.

Let the farmers' wives most earnestly  
consider the rural schools. Have ideals  
and work toward their fulfillment. With  
the children much can be accomplished.  
Don't teach them to hate the farm; teach  
them to love it. Don't praise the boy who  
is striving to sign M. D. to his name,  
while another is regarded as only the  
farmer of the family.

Rest rooms in our rural villages should  
be another aim of the farm woman. Long  
rides in the cold and getting warm around  
the usual country store stove is not a  
very pleasant feature of the farm woman's  
shopping. I know, I've been there.

If one of these aims could be accom-  
plished in 1902 in any rural community the  
New Year would be considered a most fruit-  
ful one. And it is fruit that gives the hap-  
piness. Yes, we wish for our readers these  
and many more temporal blessings. Let us  
strive together for farm homes that  
will develop stalwart sons and pure, gen-  
tle daughters, that are posterity's great-  
est boon. With these aims we wish our  
readers a Happy New Year and a Happy  
All Year.

Written for the RURAL WORLD.  
A RURAL WORLD BUTTON.

It is worth while to have your picture  
in the paper, just to hear a few nice  
things said about you. I have been quite  
elated over the pleasant greeting my ap-  
pearance called forth. I. M. failed to say  
anything about the aforesaid remarks, so  
a few afternoons ago I gathered the  
papers all together and read them to him.  
Now what do you suppose he did? In-  
stead of being properly gratified at these  
evidences of good will, he went into the  
other room, brought out a large rug and  
laid it down in front of the mirror. Now,  
wasn't that mean?

Pine Burr wants to know who is to say  
the good things about those who send in  
pictures. Bursky has considered a most fruit-  
ful one. Pine Burr's right to a regular col-  
umn is the little story of the slender, dreamy-  
eyed girl, with the mist of romance in  
her eyes and the sadness of a first parting  
in her heart, who went forth one day  
"into the new world, which is the old,"  
to write a new page in history for herself.  
And that reminds me of a story of mine  
—not about myself, but one I wrote for a  
friend. This friend and I went to school  
together in the long ago—that is, she took  
me to school the "first day." She was  
then in her last year at school. After  
years had flown—she grew fast and she  
grew slowly—so that we were in society  
together for a few years. She married  
and I had not known much of her until  
a couple of years ago, when she received  
a number of prizes at a local fair and the  
paper wanted to give her a nice "send-  
off." She appealed to me to write her up,  
which in the fullness of my heart and the  
richness of conceit, I did. I was proud of  
that article, too. I poured out all the  
good things I knew about her, and they  
were many—for she was a good woman—  
but she was "mad" at me yet because in  
the innocence of my heart I told of her  
kindness to me when she was a sweet  
young lassie of seventeen and I was  
in the troubles of my first year at school.  
The memory was a dear one to me, and  
how could I know that we were now of  
the same age!

I have written so much "flower talk" for  
the magazines that it has spoiled my  
pleasure from writing friendly flower let-  
ters. I find myself spacing off my thou-  
sand words and get that "tired feeling"  
that comes from doing what you have to  
do, but some day I would like to tell the  
RURAL WORLD folks a little flower  
story. "What Happened One Time."  
I like Pearl M.'s letter. I am going to  
send the report of that "star flower" to a  
friend in Connecticut, who sent me seed  
of this plant last spring. Neither of us  
succeeded in raising star flowers and were  
a little doubtful in regard to their much  
advertised beauties. All of our flowers  
are weeds somewhere, they tell me, Pearl,  
and all of our men were once boys. Some  
of the best citizens we have I remember  
as boys whose deeds of wickedness were  
household gossip some twenty years ago.  
It is the goody-goody boy I fear far more  
than the straightforward "monster" of  
impudence and mischief.  
Mrs. Strong refers to the Home Circle  
ribbon. Ribbons get wrinkled, mussed and  
shabby. I think the proper thing would  
be the button. There are button-makers  
in St. Louis who will supply buttons of  
any design for, perhaps, ten cents apiece.  
I suggest that we talk the button idea  
over, settle on a design, send in the  
"price" and ask our editor if he won't re-  
ceive them from the button man for us.  
I think, ordered in quantity, that they  
would cost about ten cents each and two  
cents to the RURAL WORLD man for  
postage. There are as many as fifty of  
us who would want buttons. The "button  
man" would make them for us in that  
quantity, wouldn't he, Mr. Chubbuck? I,  
as I am talking, would suggest as a design  
the rural school. Have ideals and  
work toward their fulfillment. With the  
children much can be accomplished.  
Don't teach them to hate the farm; teach  
them to love it. Don't praise the boy who  
is striving to sign M. D. to his name,  
while another is regarded as only the  
farmer of the family.

Rest rooms in our rural villages should  
be another aim of the farm woman. Long  
rides in the cold and getting warm around  
the usual country store stove is not a  
very pleasant feature of the farm woman's  
shopping. I know, I've been there.

Photo Furnished by Alsop &amp; Farmer, Cave Springs, Mo.

The above photo is a sample of over  
200 illustrations that are in the Sure Hatch  
Incubator Company's Fifth Annual Catalogue.  
It is a book of 166 pages, contains  
page after page of useful, practical, every-  
day poultry information and should be in  
the hands of every poultry raiser; besides  
the poultry information it describes the  
Sure Hatch Incubators and Common Sense  
Brooders, tells how to get good guaran-  
teed machines at a reasonable price. Any-  
one can operate the Sure Hatch, they run

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March 24, 1901.

E. J. Carver, Colo. Iowa.

Dear Sir: Enclosed find \$2.00 for your valuable remedy. I had four head of cattle with lumpy jaw. Two are well already and the other two are getting well fast. Your medicine has done more than I expected. Yours,

N. C. BOHL, Matlito, Neb.

If any of your cattle are troubled with lumpy jaw, better write Mr. Carver to

Dist. Pa. Agt.,  
Sta. Louis, Mo.

Columbus, O., Dec. 24.—A ten day sparrow hunt by farmers of Portage & Pleasant Townships, Hancock County, Ind., drawing to a close with the practical extermination of the pest here. More than 50,000 sparrows have been killed. The women of the churches will serve bird dinner to the party that kills

most birds.